CDC
March 17, 2000 / Vol. 49 / No. 10

MMWR™
MORBIDITY AND MORTALITY
WEEKLY REPORT

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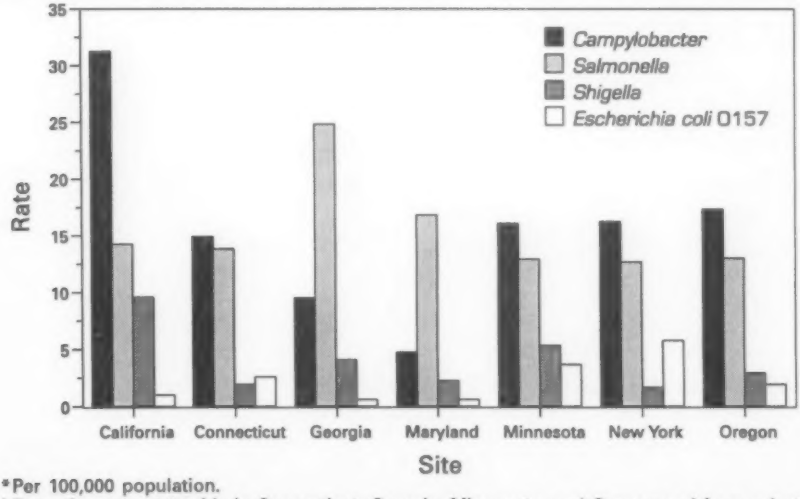
Preliminary FoodNet Data on the Incidence of Foodborne Illnesses — Selected Sites, United States, 1999

Each year in the United States, an estimated 76 million persons experience foodborne illnesses (*1*). CDC's Emerging Infections Program Foodborne Diseases Active Surveillance Network (FoodNet) collects data on nine foodborne diseases in selected U.S. sites to quantify and monitor foodborne illnesses (*2–4*). This report describes preliminary surveillance data for 1999 and compares them with data from 1996–1998. The data suggest that the incidence of the foodborne illnesses under surveillance declined during 1999 compared with 1996 primarily as a result of decreases in campylobacteriosis and shigellosis and indicate substantial regional variation in the incidence of foodborne diseases (Figure 1).

FIGURE 1. Rate* of laboratory-confirmed infections detected by the Foodborne Diseases Active Surveillance Network (Foodnet)†, by site — United States, 1999



*Per 100,000 population.
† Reporting was statewide in Connecticut, Georgia, Minnesota, and Oregon and from selected counties in California, Maryland, and New York.

FoodNet — Continued

In 1996, active surveillance began for laboratory-confirmed cases of *Campylobacter, Escherichia coli* O157, *Listeria monocytogenes, Salmonella, Shigella, Vibrio,* and *Yersinia enterocolitica* infections in Minnesota, Oregon, and selected counties in California, Connecticut, and Georgia. In 1997, surveillance for laboratory-confirmed cases of *Cryptosporidium* and *Cyclospora* infections was added. In 1998, the surveillance area for Connecticut became statewide and active surveillance began in selected counties in Maryland and New York. In 1999, the remaining counties in Georgia and eight counties in the metropolitan Albany, New York, area were added, covering 25.6 million persons (1998 population estimate) (*5*). To identify cases, surveillance personnel contacted each clinical laboratory in their surveillance area either weekly or monthly depending on the size of the clinical laboratory. Cases represent isolation of a pathogen; most specimens were obtained for diagnostic purposes from ill persons. Duplicate isolations of the same pathogen from the same person within 1 year were excluded from the analysis.

Preliminary 1999 incidence of pathogens was calculated using the number of cases of isolated pathogens that FoodNet had identified at clinical laboratories as the numerator and 1998 population estimates as the denominator (*5*). Final incidence will be available after 1999 population estimates are available.

1999 Surveillance

During 1999, 10,697 laboratory-confirmed cases of nine diseases under surveillance were identified: 4533 of salmonellosis, 3794 of campylobacteriosis, 1031 of shigellosis, 530 of *E. coli* O157 infections, 474 of cryptosporidiosis, 163 of yersiniosis, 113 of listeriosis, 45 of *Vibrio* infections, and 14 of cyclosporiasis. Among the 4095 *Salmonella* isolates serotyped, 982 (24%) were serotype Typhimurium, 403 (10%) were serotype Enteritidis (SE), 362 (9%) were serotype Newport, 284 (7%) were serotype Heidelberg, and 231 (6%) were serotype Muenchen; 405 (10%) of *Salmonella* isolates were untyped. Among the 949 *Shigella* isolates with a known species, 626 (66%) were *S. sonnei* and 295 (31%) were *S. flexneri.*

For all reporting sites in 1999, incidence per 100,000 population was highest for salmonellosis (17.7), campylobacteriosis (14.8), and shigellosis (4.0). Substantial variation in incidence was observed among the sites for some pathogens (Figure 1). In 1999, the incidence of campylobacteriosis ranged from 6.6 in Maryland to 32.5 in California. Overall, salmonellosis incidence was similar (from 12.7 to 17.5) among all sites, except in Georgia where the incidence was 25.5. Rates for infections with specific *Salmonella* serotypes varied: infection with *S.* Typhimurium ranged from 2.0 in New York to 4.6 in Georgia, SE from 0.7 in New York to 4.0 in Maryland, and *S.* Newport from 0.2 in New York to 3.2 in Georgia. Incidence of shigellosis ranged from 1.7 in New York to 9.7 in California, *E. coli* O157 infections ranged from 0.6 in Georgia to 5.8 in New York, and yersiniosis varied from 0.3 in Connecticut and New York to 0.8 in Georgia and California. The incidence of cryptosporidiosis ranged from 0.3 in Maryland to 2.3 in Georgia.

1996–1999 Rate Comparison at Original FoodNet Sites

From 1996 to 1999, the incidence of three laboratory-confirmed infections under surveillance declined substantially in the five original FoodNet sites (Table 1). Over this period, the incidence of *Campylobacter* declined 26%, including 19% from 1998 to 1999; all states reported declines in *Campylobacter* rates. The incidence of shigellosis decreased 44% from 1996 to 1999; *S. sonnei* decreased 52% (from 6.4 to 3.1), and *S. flexneri* declined 25% (from 2.0 to 1.5). Rates of *E. coli* O157 infection decreased 22%.

FoodNet — Continued

TABLE 1. Rate* of selected pathogens detected by the Foodborne Diseases Active Surveillance Network (FoodNet)† at the five original sites, by year and organism — United States, 1996–1999

Organism	1996	1997	1998	1999
Campylobacter	23.5	25.2	21.4	17.3
Cryptosporidium	NR§	3.0	3.4	2.9
Cyclospora	NR§	0.3	<0.1	<0.1
Escherichia coli O157	2.7	2.3	2.8	2.1
Listeria	0.5	0.5	0.6	0.5
Salmonella	14.5	13.6	12.3	14.8
Shigella	8.9	7.5	8.5	5.0
Vibrio	0.2	0.3	0.3	0.2
Yersinia	1.0	0.9	1.0	0.8
Total	**51.2**	**50.3¶**	**47.2¶**	**40.7¶**

*Per 100,000 population.

† In 1996, active surveillance began for laboratory-confirmed cases of *Campylobacter, Escherichia coli* O157, *Listeria, Salmonella, Shigella, Vibrio,* and *Yersinia* infections in Minnesota, Oregon, and selected counties in California, Connecticut, and Georgia. In 1997, surveillance for laboratory-confirmed cases of *Cryptosporidium* and *Cyclospora* infections began in Connecticut, Minnesota, and Oregon, and selected counties in California.

§ Not reported.

¶ Excludes *Cryptosporidium* and *Cyclospora.*

The overall incidence of salmonellosis decreased 15% from 1996 to 1998; however, the incidence increased 20% from 1998 to 1999. Compared with 1998 rates, 1999 rates for salmonellosis increased in Connecticut, Georgia, Minnesota, and Oregon, and declined in California. Rates for *S.* Typhimurium, the most common serotype, were constant from 1996 to 1999 (3.9 and 3.6, respectively). SE rates declined 48% from 1996 to 1999 with a 7% decline from 1998 to 1999. From 1998 to 1999, *Salmonella* infections with serotypes Muenchen, Newport, and Heidelberg increased 348%, 79%, and 44% respectively. The incidence of listeriosis, *Vibrio* infections, and yersiniosis were unchanged during the 4-year period. Comparing the data on parasitic diseases from 1997 to 1999 (using only the sites reporting in all 3 years), rates of *Cyclospora* infections decreased 70% (from 0.3 to <0.1); rates of *Cryptosporidium* infection were constant from 1997 to 1999 (from 3.0 to 2.9).

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FoodNet — Continued

Editorial Note: FoodNet data for 1999 indicate a decline in several major bacterial and parasitic causes of foodborne illnesses. *Camplyobacter* infections, the leading bacterial foodborne illnesses during 1996–1998, decreased in 1999 in all original FoodNet sites. SE, *Shigella*, and *E. coli* O157 cases also declined substantially. Decreases in the incidence of foodborne illnesses occurred concurrently with disease prevention efforts, including implementation of changes in meat and poultry processing plants, new requirements for food service establishments, and increased attention to good agricultural practices for produce and eggs on farms (*6*).

From 1998 to 1999, although *S.* Typhimurium rates were steady and SE rates declined, salmonellosis rates increased in all original FoodNet sites except California. The reasons for the increased incidence of *Salmonella* infections are unclear. *Salmonella* can be acquired from foods of animal origin and foods contaminated with animal feces (*7*); however, in 1999, several large salmonellosis outbreaks were traced to produce vehicles, including unpasteurized orange juice (*S.* Muenchen) (*8*), mangos (*S.* Newport), and raw sprouts (*S.* Mbandaka). Controlling *Salmonella* requires prevention efforts among all food commodities. The decline in *Shigella* was largely restricted to *S. sonnei*, and followed an outbreak in 1998 traced to imported parsley (*9*), which increased attention to produce-associated shigellosis.

The findings in this report are subject to several limitations. First, although FoodNet surveillance encompassed 9% of the U.S. population in 1999, these areas were not a nationally representative sample. Second, FoodNet data are limited to laboratory-confirmed illnesses; however, most foodborne illnesses are neither laboratory confirmed nor reported to state health departments. Third, some laboratory-confirmed illnesses reported to FoodNet can be acquired through nonfoodborne routes, such as water, person-to-person contact, and direct animal exposure; therefore, rates do not represent foodborne sources only. Further surveillance is necessary to determine whether changes represent year-to-year variation or definitive trends.

In 2000, selected counties in Tennessee and Contra Costa County, California, will be added to the FoodNet area, bringing the FoodNet surveillance population to approximately 29 million persons—11% of the U.S. population (1998 estimates). The 1999 final FoodNet report will include incidence figures and other information, such as illness severity, and will be available later in 2000 at the FoodNet site on the World-Wide Web, http://www.cdc.gov/ncidod/dbmd/foodnet. Because the population within FoodNet sites probably has increased since 1998 (the increase from 1997 to 1998 was 1%), the final 1999 rates might be slightly lower than the preliminary rates. Additional analysis of FoodNet surveillance data, foodborne outbreak data (*10*), and surveys of clinical laboratories, health-care providers, and consumers will facilitate interpretation of FoodNet data and help track temporal trends in foodborne illnesses.

References

1. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States [Review]. Emerg Infect Dis 1999;5:607–25.
2. CDC. The Foodborne Diseases Active Surveillance Network, 1996. MMWR 1997;46:258–61.
3. CDC. Incidence of foodborne illnesses—FoodNet, 1997. MMWR 1998;47:782–6.
4. CDC. Incidence of foodborne illnesses: preliminary data from the Foodborne Diseases Active Surveillance Network (FoodNet)—United States, 1998. MMWR 1999;48:189–94.
5. Bureau of the Census, Economics and Statistics Administration, US Department of Commerce. Population estimates. Available at http://www.census.gov/population/www/estimates/popest.html. Accessed August 1999.

FoodNet — Continued

6. CDC. Outbreaks of *Salmonella* serotype Enteritidis infection associated with eating raw or undercooked shell eggs—United States, 1996–1998. MMWR 2000;49:73–9.
7. Tauxe RV. *Salmonella*: a postmodern pathogen. Journal of Food Protection 1991;54: 563–8.
8. CDC. Outbreak of *Salmonella* serotype Muenchen infections associated with unpasteurized orange juice—United States and Canada, June 1999. MMWR 1999;48:582–5.
9. CDC. Outbreaks of *Shigella sonnei* infection associated with eating fresh parsley—United States and Canada, July–August 1998. MMWR 1999;48:285–9.
10. CDC. Surveillance for foodborne-disease outbreaks—United States, 1993–1997. In: CDC surveillance summaries (March). MMWR 2000;49(no. SS-1).

Hantavirus Pulmonary Syndrome — Panama, 1999–2000

Hantavirus pulmonary syndrome (HPS) is an acute viral rodentborne zoonosis characterized by severe cardiopulmonary illness with a 40%–60% case-fatality rate. Since its identification in the United States in 1993, the recognized clinical spectrum of illnesses associated with human hantavirus infection has expanded to include mild illness, and case-patients have been identified in Canada and South America (*1,2*). This report describes the first confirmed HPS cases from Central America and summarizes preliminary results of clinical, epidemiologic, and ecologic investigations. Investigators identified 12 suspected cases with typical disease and captured four common species of rodents near case households.

In mid-January 1999, reports of a cluster of acute febrile respiratory illnesses associated with three deaths in Las Tablas and Guarare districts, Los Santos province, Panama (population: 55,000), led to an investigation by the Gorgas Memorial Institute for Health Studies (GMIHS) and the Panamanian Ministry of Health (MOH). Human illness was characterized by fever, myalgia, headache, and cough with rapid progression to respiratory failure and bilateral pulmonary infiltrates, hypotension, and thrombocytopenia consistent with HPS. Initial laboratory testing of specimens at CDC from three case-patients confirmed the presence of IgM and IgG antibodies using antigens of Sin Nombre virus and the presence of detectable hantavirus RNA by reverse-transcription polymerase chain reaction (RT-PCR).

As of March 6, 2000, 12 patients with suspected HPS have been identified; three died. The mean age of patients was 42 years (range: 26–58 years); 58% were women. Serum specimens taken from eight case-patients who met the CDC epidemiologic case definition (*1*) had hantavirus antibodies, including two specimens that also were positive by RT-PCR. Serologic testing is pending for another suspected case-patient. Although the three patients who died had signs and symptoms compatible with HPS, epidemiologic data are limited and no specimens from these patients are available for diagnostic testing. The first case-patient was identified retrospectively as having onset of illness in August 1999; the latest case-patient had onset of illness on February 28. All 12 case-patients had clinical disease typical of HPS; however, seven case-patients had atypical extrapulmonary symptoms of hepatic, renal, and cerebral dysfunction. No cases have been reported among health-care workers or from person-to-person transmission. Studies to define the prevalence of hantavirus infection among community members and health-care workers, the extent of mild or asymptomatic infection, and the risk factors for developing HPS are in progress.

Hantavirus Pulmonary Syndrome — Continued

Rodent trapping at 10 homes, six occupied by confirmed case-patients, yielded 54 rodents; four common species accounted for 98% of captured rodents and were identified tentatively as *Zygodontomys brevicauda* (25 [46%]), *Sigmodon hispidus* (14 [26%]), *Mus musculus* (eight [15%]), and *Oligoryzomys* sp. (six [11%]). Although only 5% of traps captured rodents, reports from GMIHS indicated a recent increase in peridomestic rodents associated with increased rainfall and flooding in surrounding areas.

To prevent additional hantavirus transmission to humans, MOH disseminated information to the Los Santos community about risk-reduction measures and to physicians about how to recognize patients and manage HPS. A public awareness and risk-reduction campaign was implemented nationwide and included televised public service announcements and distribution of educational posters and pamphlets. In addition, an outbreak communication center was established and staffed 24 hours a day by specially trained physicians, public health officials, and health educators to collect reports of suspected HPS cases and to answer questions from the public and health-care providers about hantaviruses. MOH physicians are contacting hospitals nationwide to promote HPS awareness, to evaluate suspected cases, and to provide treatment guidance on the basis of standard HPS criteria and guidelines (*3*).

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Editorial Note: HPS is a pan-American zoonosis identified in 1993 with confirmed cases ranging from Canada and the United States to southern South America (*2,4*). HPS is attributed to infection with New World hantaviruses maintained by natural hosts in the rodent family Muridae, subfamily Sigmodontinae. Infection in humans occurs after inhalation of aerosolized virus or direct contact with infected rodents or their excreta. Person-to-person and nosocomial transmission have been documented only in Argentina with Andes virus (*5*). An increasing number of hantaviruses is being identified by genetic sequencing, including from the two RT-PCR–positive cases described in this report (*6*). On the basis of antigenic similarities, CDC has identified all cases using Sin Nombre antigens. The predominant viruses in the United States have been Sin Nombre and the closely related New York viruses, the reservoirs of which are *Peromyscus* spp. (deer mice and white-footed mice); *Peromyscus* spp. have caused 234 cases reported in the United States as of March 2000 (CDC, unpublished data, 2000).

The epidemiology of HPS is closely related to the ecology of the rodent reservoir populations. Increased U.S. incidence of HPS has been linked to periods of above average rainfall in normally dry areas of the southwestern United States resulting in improved habitat quality and increased numbers of infected reservoir rodents (*7*). Blood and tissue samples from the captured species of sigmodontine rodents in Panama will be tested for hantavirus antibody and RNA to identify the specific reservoir. Preliminary

Hantavirus Pulmonary Syndrome — Continued

data indicate that rainfall in parts of Los Santos was unusually high during the fall and winter of 1999. A possible association between increased precipitation and increased numbers of reservoir rodents in the affected and surrounding areas is being expiored. Sigmodontine rodents occur throughout the Americas, but HPS never has been found between Texas and Brazil. However, the discovery of HPS in Panama was expected and should lead to increased vigilance for the syndrome in Mexico, Central America, and northern South America.

Because no specific therapy exists for HPS, prevention measures should be taken to avoid contact with wild rodents, including preventing entry of wild rodents into human dwellings; eliminating food and shelter for rodents in the peridomestic environment; safe trapping (using kill-traps) and disposal of wild rodents that enter homes; and careful cleaning and disinfecting of areas in and around homes that have been contaminated by rodents (*8*). Reports of HPS and requests for diagnostic testing and epidemic assistance can be directed to CDC's National Center for Infectious Diseases, Division of Viral and Rickettsial Diseases, Special Pathogens Branch, telephone (404) 639-1511. Information about HPS can be found on the CDC World-Wide Web site, http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm.

References

1. Young J, Mills J, Enria D, Dolan N, Khan A, Ksiazek T. New World hantaviruses. British Med Bull 1998;54:659–73.
2. Peters CJ. Hantavirus pulmonary syndrome in the Americas. In: Scheld WM, Craig WA, Hughes JM, eds. Emerging infections 2. 2nd ed. Washington, DC: ASM Press, 1998:17–63.
3. Pan American Health Organization. Hantavirus in the Americas: guidelines for diagnosis, treatment, prevention and control. Washington, DC: Pan American Health Organization, 1999:1–65.
4. Schmaljohn C, Hjelle B. A global disease problem. Emerg Infect Dis 1997;3:95–104.
5. Wells RM, Sosa Estani S, Yadon ZE, et al. An unusual hantavirus outbreak in southern Argentina: person-to-person transmission? Emerg Infect Dis 1997;3:171–4.
6. Nichol ST. Genetic analysis of hantaviruses and their host relationships. In: Saluzzo JF, Dodet B, eds. Factors in the emergence and control of rodent-borne viral diseases. Paris, France: Elsevier SAS, 1999:99–109.
7. Engelthaler DM, Mosley DG, Cheek JE, et al. Climatic and environmental patterns associated with hantavirus pulmonary syndrome, Four Corners region, United States. Emerg Infect Dis 1999;5:87–94.
8. CDC. Hantavirus infection—southwestern United States: interim recommendations for risk reduction. MMWR 1993;42:1–13.

Outbreaks of Norwalk-like Viral Gastroenteritis — Alaska and Wisconsin, 1999

Norwalk-like viruses (NLVs) are the most common cause of epidemic gastroenteritis in the United States, resulting in illness in approximately 23 million persons each year (*1,2*). Persons of all ages are affected because previous infection confers only short-term immunity (*3*). Most NLV gastroenteritis outbreaks involve foodborne or person-to-person transmission. This report presents investigations of a foodborne NLV outbreak in Alaska and person-to-person transmission in Wisconsin.

Norwalk-like Viral Gastroenteritis — Continued

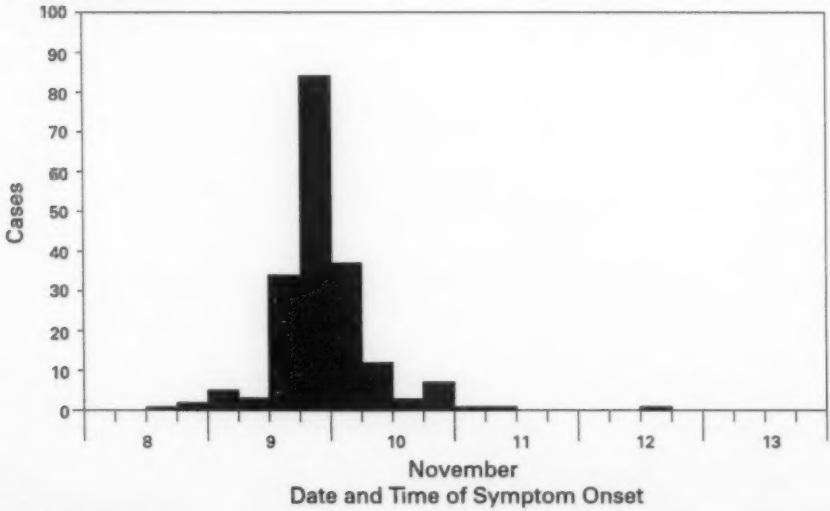
Alaska

On November 10, 1999, a company in Anchorage notified the Alaska Division of Public Health that an estimated 20% of its 500 employees had called in sick. Ill workers reported signs and symptoms of acute gastroenteritis (AGE)—primarily nausea, diarrhea, and vomiting—following a restaurant-catered company luncheon on November 8.

On November 11, questionnaires were e-mailed to 500 company employees; 456 (91%) were returned. A case was defined as nausea, vomiting, or diarrhea occurring in a company employee 1–96 hours after eating the restaurant food. Because the same batches of food served at the luncheon were available at the restaurant during the 4 days following the luncheon, 56 restaurant patrons were identified from credit card receipts to determine whether any were ill. Sanitarians investigated the restaurant facilities and interviewed foodhandlers. Stool samples were collected from ill luncheon attendees, foodhandlers, and ill restaurant patrons.

Of 343 company employees who completed a questionnaire and ate luncheon food, 191 (56%) had an illness meeting the case definition. Among ill luncheon attendees, symptoms included nausea (87%), diarrhea (80%), abdominal pain (75%), chills (73%), vomiting (70%), and headache (65%). Illness onsets occurred a median of 33 hours after eating the lunch (range: 6–96 hours) (Figure 1), and the median duration of illness was 24 hours (range: 5–120 hours). Of 236 luncheon attendees who ate potato salad, 183 (78%) became ill. In addition, eight (89%) of nine restaurant patrons who responded ate potato salad and became ill. Among luncheon attendees, eating potato salad was associated strongly with illness (odds ratio=42.7; 95% confidence interval=18.6–101.7). The potato

FIGURE 1. Number of cases of Norwalk-like viral gastroenteritis among company employees, by date and time* of symptom onset — Anchorage, Alaska, November 8–13, 1999



*6-hour intervals.

Norwalk-like Viral Gastroenteritis — Continued

salad was prepared 2 days before the luncheon by two foodhandlers, one of whom was ill. The ill foodhandler used bare hands to mix the ingredients in a 12-gallon plastic container.

Stool samples from 11 ill luncheon attendees, three foodhandlers, and two ill restaurant patrons were tested. No bacterial pathogens were isolated. Thirteen specimens tested at CDC by reverse transcriptase-polymerase chain reaction (RT-PCR) were positive for NLV: 10 from ill luncheon attendees, one from the ill foodhandler, and two from restaurant patrons. RT-PCR products from one luncheon attendee, one restaurant patron, and the implicated foodhandler had identical nucleotide sequences.

Wisconsin

During November 30–December 1, 1999, seven students living on the same floor of a university residence hall with shared bathroom facilities developed signs and symptoms of AGE, including nausea, vomiting, and diarrhea. They were taken to local emergency departments. In conjunction with the Madison Department of Public Health and the Wisconsin Division of Public Health, the University Health Service initiated an investigation on December 1.

All residents of the involved floor were administered a symptom, event, and food history questionnaire. A case of AGE was defined as vomiting or three or more loose stools within a 24-hour period in a hall resident during November 27–December 3. Specimen kits were distributed to all hall residents for stool sample collection.

Of the 36 hall residents, all returned from Thanksgiving break during November 27–29. Nineteen (53%) of the residents had illnesses meeting the case definition. Signs and symptoms of illness among the case patients included fatigue (100%), vomiting (95%), chills (95%), body aches (84%), diarrhea (74%), abdominal cramps (63%), muscle aches (58%), headache (58%), and subjective fever (44%). The cases clustered in time into four groups (Figure 2). The probable index case-patient had multiple episodes of diarrhea and vomiting between 7 p.m. on November 28 and 6:30 a.m. on November 29. Twelve case-patients had illness onsets between noon on November 30 and noon on December 1 (secondary), five had illness onsets between noon on December 1 and noon December 2 (tertiary), and one had illness onset early in the morning of December 3. The mean illness duration was approximately 24 hours (range: 3.5–33 hours). None of the seven patients treated in emergency departments was hospitalized. No particular event, meal, food, or beverage was associated with illness. Only one person with a secondary case reported exposure to someone who was vomiting before illness onset. Three of the five persons with tertiary cases reported exposure to someone who was vomiting during the previous 36 hours.

Stool specimens were obtained from eight case-patients. Seven were tested for bacterial pathogens at the Wisconsin State Laboratory of Hygiene (WSLH), and all were negative. Five of seven stool specimens tested at WSLH were positive by RT-PCR for NLV. The five positive specimens were obtained from the index case-patient, three from secondary case-patients, and one from a tertiary case-patient (Figure 2). The nucleotide sequences of RT-PCR products from four case-patients (the index case-patient and two secondary and the tertiary case-patients) were determined at CDC and were identical.

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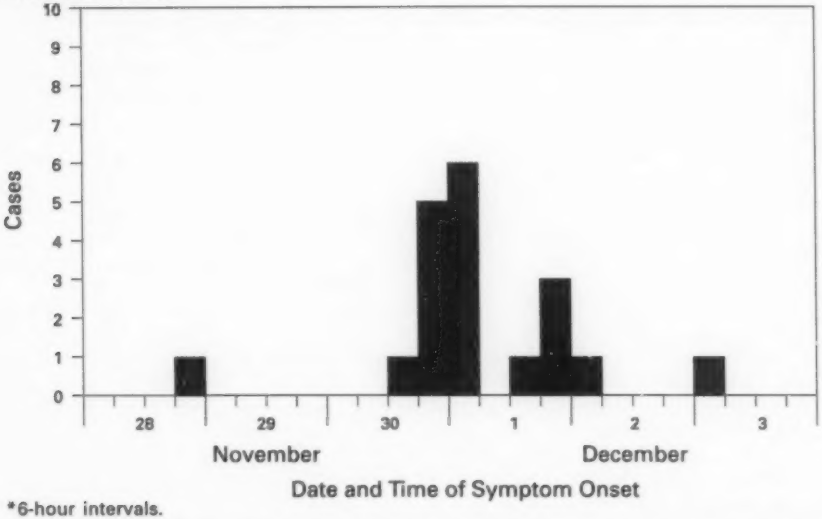
Norwalk-like Viral Gastroenteritis — Continued

FIGURE 2. Number of cases of Norwalk-like viral gastroenteritis among hall residents, by date and time* of symptom onset — Madison, Wisconsin, November 28–December 3, 1999



*6-hour intervals.

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Editorial Note: These two outbreaks illustrate two principal modes of epidemic NLV transmission: consuming contaminated food and person-to-person transmission. In a study of 51 NLV outbreaks, modes of transmission included foodborne (excluding oysters) (37%), person-to-person (20%), consuming contaminated oysters (10%), waterborne (6%), and indeterminate (27%) (*1*). Person-to-person transmission, including direct contact, aerosol, and fomite exposure, generally has been reported in outbreaks involving elder-care settings, hospitals, or cruise ships (*1,4*).

The low infectious dose of NLVs permits efficient transmission. The Alaska outbreak was associated with eating contaminated potato salad. In this outbreak, an ill foodhandler contaminated enough potato salad to cause illness in at least 200 persons. Evidence from the Wisconsin outbreak, particularly the grouping of cases, suggests that NLV was transmitted person-to-person. Because of the close living quarters and shared bathroom facilities, direct and fomite transmission most likely occurred. Less likely is that secondary case illnesses resulted from aerosol transmission of NLV; only one ill person reported exposure to someone who was vomiting. However, aerosol transmission may have contributed to subsequent NLV spread because three persons with tertiary cases reported exposure to secondary case-patients who were vomiting.

Basic sanitary measures, such as diligent handwashing, can prevent foodborne transmission. In addition, ill workers should be excluded from food handling, and food preparers should minimize direct contact with ready-to-eat foods. Because improper food handling

Norwalk-like Viral Gastroenteritis — Continued

can result in large numbers of persons becoming ill, maintaining food-safety programs is an essential function of public health departments. Constant education of food handling staff and on-site inspections of food preparation facilities, including observation of food handling practices, are basic activities of effective food-safety programs.

Populations in shared living arrangements, such as residence halls, are at greater risk for viral gastroenteritis acquired by person-to-person transmission. Residents in such facilities should use good hygienic practices, especially handwashing. Bathrooms should be kept visibly clean (*5*), and potentially contaminated areas should be cleaned as soon as possible after someone has been ill.

References

1. Fankhauser RL, Noel JS, Monroe SS, Ando T, Glass RI. Molecular epidemiology of "Norwalk-like viruses" in outbreaks of gastroenteritis in the United States. J Infect Dis 1998;178: 1571–8.
2. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1999;5:841–2.
3. Johnson PC, Mathewson JJ, DuPont HL, Greenberg HB. Multiple-challenge study of host susceptibility to Norwalk gastroenteritis in US adults. J Infect Dis 1990;161:18–21.
4. Hedberg CW, Osterholm MT. Outbreaks of food-borne and waterborne viral gastroenteritis. Clin Microbiol Rev 1993;6:199–210.
5. CDC. Viral agents of gastroenteritis; public health importance and outbreak management. MMWR 1990;39(no. RR-5).

Notice to Readers

Update: West Nile Virus Isolated from Mosquitoes — New York, 2000

During January–February 2000, three pools of overwintering *Culex* spp. mosquitoes collected at Fort Totten, New York, were positive for West Nile Virus (WNV) RNA by real-time reverse transcriptase polymerase chain reaction (RT-PCR) assay (TaqMan™, Perkin-Elmer Biosystems, Foster City, California*) (*1*). Additional testing to detect the presence of intact virus was performed but was negative as of March 10, 2000. Since then, one of the pools that was positive by RT-PCR yielded a live WNV isolate in a fluid vero cell culture system and confirmed by West Nile-specific monoclonal antibody staining of virus infected cells and virus gene sequencing. Studies of this isolate continue.

Reference

1. CDC. Update: surveillance for West Nile Virus in overwintering mosquitoes—New York, 2000. MMWR 2000;49:178–9.

*Use of trade names is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

Notices to Readers — Continued

Notice to Readers

National Colorectal Cancer Awareness Month — March 2000

Colorectal cancer is the second leading cause of cancer-related deaths in the United States (*1*). In 2000, approximately 130,000 cases of the disease will be diagnosed, and more than 56,000 deaths will be attributed to this cancer (*1*). Randomized controlled trials show that screening by fecal occult blood testing can decrease the death rate of this disease by as much as 30%, and prospective observational data suggest that endoscopic removal of premalignant polyps can decrease the incidence 75% to 90% (*2,3*). Because screening is effective in reducing morbidity and mortality from colorectal cancer, a number of professional societies, government agencies, and voluntary health organizations recommend screening for colorectal cancer for persons aged ≥50 years (*4*). Despite recommendations for screening, research indicates that many who are at risk for colorectal cancer are not being screened (*5*).

Because of the impact of colorectal cancer on the nation's health, the U.S. Senate declared March 2000 as the first National Colorectal Cancer Awareness Month. The purpose of this designation is to increase public awareness about the disease burden associated with colorectal cancer and to encourage people aged ≥50 years to reduce their risk for colorectal cancer through regular screening examinations. Additional information about the month, special events, and resource materials are available on the World-Wide Web at http://www.preventcancer.org/colorectal.htm.* Information on CDC's national colorectal cancer action campaign *Screen for Life* is available at http://www.cdc.gov/cancer/screenforlife.

References

1. American Cancer Society. Cancer facts and figures, 2000. Atlanta, Georgia: American Cancer Society, 2000; publication no. 5008.00.
2. Mandel JS, Bond JH, Church TR, et al. Reducing mortality from colorectal cancer by screening for fecal occult blood: Minnesota Colon Cancer Control Study. N Engl J Med 1993;328:1365–71.
3. Winawer SJ, Zauber AG, Ho MN, et al. Prevention of colorectal cancer by colonoscopic polypectomy: The National Polyp Study Workgroup. N Engl J Med 1993;329:1977–81.
4. Winawer SJ, Fletcher RH, Miller L, et al. Colorectal cancer screening: clinical guidelines and rationale. Gastroenterology 1997;112:594–642.
5. CDC. Screening for colorectal cancer—United States, 1997. MMWR 1999;48:116–21.

*References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

Notices to Readers — Continued

Notice to Readers

Introduction to Public Health Surveillance Course

CDC and Emory University's Rollins School of Public Health will cosponsor a course, "Introduction to Public Health Surveillance" during May 22–26, 2000, at Emory University in Atlanta, Georgia. The course is designed for state and local public health professionals.

The course will provide practicing public health professionals with the theoretic and practical tools necessary to design, implement, and evaluate effective surveillance programs. Topics include overview and history of surveillance systems; planning considerations; sources and collection of data; analysis, interpretation, and communication of data; surveillance systems technology; ethics and legalities; state and local concerns; and future considerations. There is a tuition charge.

Deadline for applications is April 1. Additional information and applications are available from Emory University, International Health Dept., 1518 Clifton Rd., N.E., Room 746, Atlanta, GA 30322; telephone (404) 727-3485; fax (404) 727-4590; or World-Wide Web site http://www.sph.emory.edu/EPICOURSES*; or e-mail pvaleri@sph.emory.edu.

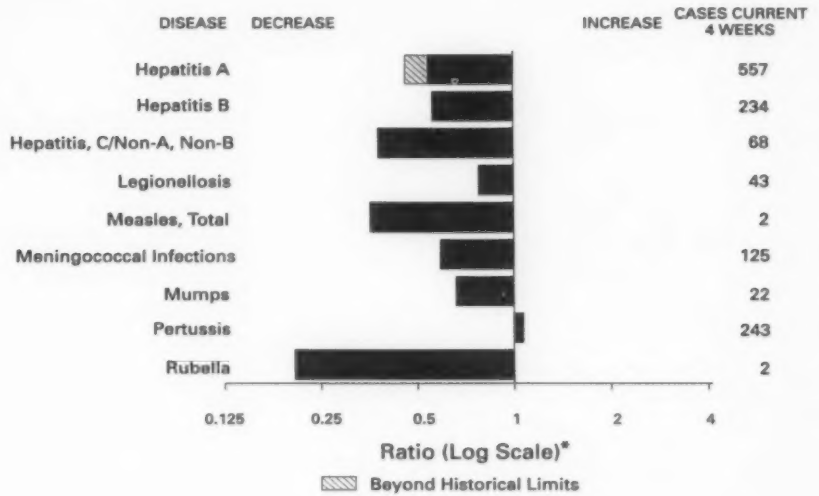
*References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

Errata: Vol. 49, No. 9

In the article "Update: Pulmonary Hemorrhage/Hemosiderosis Among Infants—Cleveland, Ohio, 1993–1996," two errors occurred on page 181. In the paragraph under Case Identification, words were omitted from the sentence that begins on the ninth line, which should read, "Therefore, in referring to the cluster of cases in Cleveland, the working group defined that cluster as *acute idiopathic pulmonary hemosiderosis* (AIPH) in infants." The heading for the second section on that page had transposed words and should read, "Association of *AIPH with Household* Water Damage and Fungi."

In the article "Update: Influenza Activity—United States, 1999–2000 Season," on page 176 in Figure 2, the † and § symbols were omitted from two of the figure labels. The footnotes should appear as "Percentage of patient visits to sentinel physicians for influenza-like illness†" and "Number of state and territorial epidemiologists reporting widespread or regional influenza activity§".

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending March 11, 2000, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending March 11, 2000 (10th Week)

	Cum. 2000		Cum. 2000
Anthrax	-	HIV infection, pediatric*†	34
Brucellosis*	3	Plague	2
Cholera	-	Poliomyelitis, paralytic	-
Congenital rubella syndrome	1	Psittacosis*	4
Cyclosporiasis*	2	Rabies, human	-
Diphtheria	-	Rocky Mountain spotted fever (RMSF)	23
Encephalitis: California* serogroup viral	1	Streptococcal disease, invasive Group A	550
eastern equine*	-	Streptococcal toxic-shock syndrome*	25
St. Louis*	-	Syphilis, congenital¶	-
western equine*	-	Tetanus	2
Ehrlichiosis human granulocytic (HGE)*	14	Toxic-shock syndrome	28
human monocytic (HME)*	1	Trichinosis	1
Hansen Disease*	7	Typhoid fever	56
Hantavirus pulmonary syndrome*†.	-	Yellow fever	-
Hemolytic uremic syndrome, post-diarrheal*	14		

-: no reported cases
*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update February 27, 2000.
¶Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2000†	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	6,288	6,945	92,763	126,196	183	264	246	206	123	176
NEW ENGLAND	511	352	3,803	3,991	7	11	21	31	18	31
Maine	6	5	247	141	1	1	1	2	1	-
N.H.	5	13	155	199	-	1	4	1	3	1
Vt.	1	4	109	99	5	1	1	1	2	-
Mass.	370	238	1,506	1,735	-	7	7	18	4	16
R.I.	17	20	424	412	1	-	-	-	-	1
Conn.	112	72	1,362	1,415	-	1	8	9	8	13
MID. ATLANTIC	1,592	1,492	4,001	14,785	19	51	23	13	20	2
Upstate N.Y.	65	76	N	N	12	19	23	9	20	-
N.Y. City	986	835	-	7,244	4	26	-	1	-	1
N.J.	387	370	637	2,433	-	2	-	3	-	1
Pa.	154	211	3,364	5,108	3	4	N	N	-	-
E.N. CENTRAL	590	489	16,192	19,901	19	50	29	38	8	23
Ohio	92	97	3,877	8,536	12	6	9	20	3	7
Ind.	56	52	2,254	2,135	3	3	3	8	1	7
Ill.	353	231	4,453	5,108	-	6	9	5	-	3
Mich.	67	81	4,191	3,866	4	7	8	5	2	3
Wis.	22	28	1,417	2,256	-	28	N	N	2	3
W.N. CENTRAL	151	161	4,620	7,976	11	19	60	38	27	48
Minn.	32	28	1,098	1,493	3	10	11	10	10	12
Iowa	10	13	605	446	1	1	11	5	4	2
Mo.	70	84	902	3,643	2	4	30	3	8	2
N. Dak.	-	3	-	175	1	-	2	2	1	1
S. Dak.	2	3	347	398	1	1	-	-	-	-
Nebr.	7	10	611	728	2	1	2	4	2	31
Kans.	30	20	1,057	1,093	-	2	4	14	2	-
S. ATLANTIC	1,531	1,832	20,330	27,019	33	39	24	21	15	11
Del.	26	31	548	592	-	-	-	1	-	-
Md.	153	252	1,185	2,600	2	4	5	1	1	-
D.C.	112	69	552	N	-	3	-	-	U	U
Va.	115	102	2,761	2,973	-	-	5	6	5	2
W. Va.	6	14	267	452	-	-	2	-	1	1
N.C.	75	125	6,859	4,357	3	1	6	5	1	4
S.C.	156	128	669	4,596	-	-	-	1	-	1
Ga.	183	207	3,054	5,554	20	27	2	1	3	U
Fla.	705	904	4,437	5,895	8	4	4	6	4	3
E.S. CENTRAL	281	300	8,495	8,500	6	2	10	16	6	11
Ky.	37	37	1,531	1,486	-	1	4	5	2	4
Tenn.	105	130	2,243	2,676	-	1	5	6	4	3
Ala.	92	69	2,810	2,848	6	-	1	2	-	3
Miss.	47	64	1,911	1,490	-	-	-	3	-	1
W.S. CENTRAL	542	980	15,793	16,368	6	15	10	7	11	10
Ark.	20	34	844	1,077	1	-	4	2	1	2
La.	92	67	2,232	1,680	-	12	-	3	6	2
Okla.	16	19	1,517	1,500	1	1	3	1	3	-
Tex.	414	860	11,200	12,111	4	2	3	1	1	6
MOUNTAIN	213	207	3,637	6,883	12	22	26	14	8	11
Mont.	3	3	-	210	1	1	8	-	-	-
Idaho	3	5	64	371	1	2	3	-	-	2
Wyo.	1	-	156	151	1	-	2	1	2	1
Colo.	52	58	658	1,458	1	2	8	4	2	1
N. Mex.	26	9	334	918	1	10	-	1	-	-
Ariz.	56	86	1,407	2,617	2	7	3	3	3	1
Utah	28	27	431	339	5	N	1	5	1	5
Nev.	44	21	587	619	-	-	1	-	-	1
PACIFIC	877	1,132	15,892	20,973	70	55	43	28	10	29
Wash.	102	58	2,473	2,354	N	N	5	1	3	12
Oreg.	22	32	900	1,162	1	3	5	12	4	9
Calif.	727	1,021	12,276	16,472	69	52	30	15	-	8
Alaska	-	5	243	370	-	-	-	-	-	-
Hawaii	26	16	-	615	-	-	3	-	3	-
Guam	9	1	-	88	-	-	N	N	U	U
P.R.	153	215	142	U	-	-	-	1	U	U
V.I.	6	3	-	U	-	U	-	U	U	U
Amer. Samoa	-	-	-	U	-	U	-	U	U	U
C.N.M.I.	-	-	-	U	-	U	-	U	U	U

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

* Individual cases may be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update February 27, 2000.

§ Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	Gonorrhea		Hepatitis C/NA,NB		Legionellosis		Lyme Disease	
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	58,274	69,210	340	667	110	175	536	824
NEW ENGLAND	1,153	1,437	-	2	5	11	61	181
Maine	15	10	-	-	2	2	-	1
N.H.	14	17	-	-	1	1	15	-
Vt.	8	13	-	1	-	3	-	-
Mass.	431	566	-	1	1	2	39	79
R.I.	100	108	-	-	-	1	-	2
Conn.	585	723	-	-	1	2	7	99
MID. ATLANTIC	2,921	8,338	10	29	18	47	375	462
Upstate N.Y.	900	946	10	17	9	10	155	99
N.Y. City	-	3,539	-	-	-	8	2	16
N.J.	319	1,465	-	-	-	5	-	107
Pa.	1,702	2,388	-	12	9	24	218	240
E.N. CENTRAL	10,287	12,058	50	351	30	54	2	31
Ohio	2,227	3,217	-	-	17	15	2	9
Ind.	1,039	1,301	-	-	4	4	-	1
Ill.	3,000	3,769	3	6	1	10	-	2
Mich.	3,138	2,780	47	96	7	15	-	1
Wis.	883	991	-	249	1	10	U	18
W.N. CENTRAL	1,612	3,844	47	43	4	6	19	9
Minn.	434	551	-	-	1	-	4	1
Iowa	133	169	-	-	1	3	-	2
Mo.	367	2,309	42	38	2	2	4	2
N. Dak.	-	12	-	-	-	-	-	1
S. Dak.	51	33	-	-	-	-	-	-
Nebr.	195	339	1	1	-	1	-	-
Kans.	432	431	4	4	-	-	11	3
S. ATLANTIC	15,400	20,954	19	41	27	20	57	98
Del.	287	336	-	-	2	2	1	4
Md.	543	3,113	2	18	7	4	42	80
D.C.	463	1,426	-	-	-	-	-	1
Va.	1,689	2,152	-	6	3	2	3	-
W. Va.	64	120	1	2	N	N	4	1
N.C.	6,489	3,875	7	9	3	4	4	11
S.C.	574	2,199	-	5	2	4	-	1
Ga.	2,083	3,579	-	1	-	-	-	-
Fla.	3,208	4,154	9	-	10	4	3	-
E.S. CENTRAL	6,218	6,861	54	43	2	11	-	12
Ky.	621	745	6	5	-	5	-	-
Tenn.	1,815	2,162	17	22	1	5	-	4
Ala.	2,244	2,529	3	1	1	1	-	5
Miss.	1,538	1,425	28	15	-	-	-	3
W.S. CENTRAL	16,044	9,148	77	72	-	1	-	-
Ark.	438	495	3	2	-	-	-	-
La.	9,531	1,656	31	57	-	1	-	-
Okla.	697	799	-	1	-	-	-	-
Tex.	5,378	6,198	43	12	-	-	-	-
MOUNTAIN	1,535	1,934	46	54	8	12	1	2
Mont.	-	3	-	4	-	-	-	-
Idaho	4	24	-	4	1	-	-	-
Wyo.	14	7	31	19	-	-	-	1
Colo.	734	417	7	7	4	1	-	-
N. Mex.	62	184	4	7	-	1	-	1
Ariz.	440	999	4	11	-	1	1	-
Utah	61	36	-	1	3	5	-	-
Nev.	220	264	-	1	-	4	-	-
PACIFIC	3,104	4,636	37	32	16	13	21	29
Wash.	464	395	4	2	5	2	-	-
Oreg.	95	176	8	4	N	N	1	1
Calif.	2,516	3,888	25	26	11	11	20	28
Alaska	29	71	-	-	-	-	N	N
Hawaii	-	106	-	-	-	-	-	-
Guam	-	15	-	-	-	-	N	N
P.R.	30	59	1	-	-	-	-	U
V.I.	-	U	-	U	-	U	-	U
Amer. Samoa	-	U	-	U	-	U	-	U
C.N.M.I.	-	U	-	U	-	U	-	U

N: Not notifiable U: Unavailable -: no reported cases

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	129	231	696	890	3,675	4,640	1,959	4,254
NEW ENGLAND	-	4	82	124	237	242	215	264
Maine	-	-	16	19	25	24	9	14
N.H.	-	-	2	5	18	3	8	11
Vt.	-	-	6	20	6	11	4	11
Mass.	-	4	26	33	136	144	132	140
R.I.	-	-	-	12	3	12	12	25
Conn.	-	-	32	35	49	48	50	63
MID. ATLANTIC	14	75	148	186	313	714	245	533
Upstate N.Y.	9	18	118	116	99	129	45	163
N.Y. City	2	32	U	U	114	225	178	217
N.J.	-	18	18	43	-	185	22	148
Pa.	3	7	12	27	100	175	-	5
E.N. CENTRAL	8	24	2	1	473	723	241	613
Ohio	2	2	2	-	151	159	70	121
Ind.	1	4	-	-	50	41	44	43
Ill.	2	10	-	-	147	219	-	222
Mich.	3	5	-	1	65	173	88	158
Wis.	-	3	-	-	40	131	30	69
W.N. CENTRAL	6	8	70	128	207	249	163	279
Minn.	4	-	21	18	42	64	48	100
Iowa	-	2	7	18	19	33	14	32
Mo.	-	6	2	5	69	59	53	78
N. Dak.	-	-	9	15	2	1	10	11
S. Dak.	-	-	18	33	10	8	12	14
Nebr.	1	-	-	1	27	18	7	18
Kans.	1	-	13	40	38	66	19	26
S. ATLANTIC	40	55	306	315	722	843	389	769
Del.	-	-	10	6	9	15	7	15
Md.	19	20	66	80	113	100	67	95
D.C.	-	6	-	-	-	18	U	U
Va.	12	9	75	69	71	93	58	100
W. Va.	-	1	21	15	22	13	12	19
N.C.	4	3	64	57	156	182	67	161
S.C.	-	-	20	23	57	47	41	56
Ga.	-	6	28	28	104	178	117	223
Fla.	5	10	22	27	190	197	-	100
E.S. CENTRAL	4	5	24	47	188	287	90	184
Ky.	1	1	5	14	29	61	17	U
Tenn.	-	2	16	19	49	84	47	80
Ala.	3	2	3	14	76	79	23	54
Miss.	-	-	-	-	34	63	3	10
W.S. CENTRAL	1	9	8	19	205	335	238	449
Ark.	-	1	-	-	35	50	22	42
La.	1	6	-	-	24	49	68	61
Okla.	-	1	8	19	27	37	18	22
Tex.	-	1	-	-	119	199	130	324
MOUNTAIN	11	10	28	23	335	336	231	335
Mont.	1	1	9	10	17	4	-	1
Idaho	-	1	-	-	22	13	-	18
Wyo.	-	-	14	6	6	2	3	6
Colo.	5	3	-	1	75	94	58	100
N. Mex.	-	1	2	-	38	42	28	44
Ariz.	2	3	3	6	90	111	93	95
Utah	2	1	-	-	55	40	49	48
Nev.	1	-	-	-	32	30	-	23
PACIFIC	45	41	28	47	995	911	147	828
Wash.	2	2	-	-	42	44	59	123
Oreg.	5	7	-	-	52	71	58	90
Calif.	38	29	21	44	847	729	-	554
Alaska	-	-	7	3	12	6	2	5
Hawaii	-	3	-	-	42	61	28	56
Guam	-	-	-	-	-	13	U	U
P.R.	-	-	6	9	10	57	U	U
V.I.	-	U	-	U	-	U	U	U
Amer. Samoa	-	U	-	U	-	U	U	U
C.N.M.I.	-	U	-	U	-	U	U	U

N: Not notifiable U: Unavailable -: no reported cases

*Individual cases may be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	Shigellosis* NETSS Cum. 2000	Shigellosis* NETSS Cum. 1999	Shigellosis* PHLIS Cum. 2000	Shigellosis* PHLIS Cum. 1999	Syphilis (Primary & Secondary) Cum. 2000	Syphilis (Primary & Secondary) Cum. 1999	Tuberculosis Cum. 2000	Tuberculosis Cum. 1999†
UNITED STATES	2,263	2,366	873	1,257	1,278	1,298	1,397	2,222
NEW ENGLAND	53	54	40	58	11	13	37	59
Maine	2	1	-	-	-	-	-	1
N.H.	1	2	1	5	-	-	1	-
Vt.	1	3	-	3	-	1	-	-
Mass.	36	35	28	36	9	8	25	26
R.I.	5	9	4	7	1	1	2	15
Conn.	8	4	7	7	1	3	9	17
MID. ATLANTIC	111	187	69	112	19	57	278	365
Upstate N.Y.	66	37	27	19	-	6	16	26
N.Y. City	32	65	54	47	6	20	187	183
N.J.	-	56	8	46	2	14	69	91
Pa.	13	29	-	-	11	17	6	65
E.N. CENTRAL	344	423	115	187	233	189	166	208
Ohio	21	144	4	14	12	18	31	57
Ind.	52	17	9	8	87	48	15	16
Ill.	102	157	-	148	66	90	103	86
Mich.	161	49	99	6	56	26	11	36
Wis.	8	56	3	13	12	7	6	11
W.N. CENTRAL	152	119	65	99	15	52	80	66
Minn.	35	18	38	19	2	2	28	32
Iowa	23	2	20	3	6	1	7	-
Mo.	73	74	20	66	5	45	34	27
N. Dak.	-	1	-	1	-	-	-	-
S. Dak.	1	-	-	-	-	-	3	3
Nebr.	14	8	4	4	1	1	2	1
Kans.	6	16	3	6	1	3	6	3
S. ATLANTIC	284	358	48	82	294	490	226	354
Del.	1	5	-	1	1	1	-	4
Md.	20	22	5	6	57	103	30	36
D.C.	-	15	U	U	13	33	-	8
Va.	12	14	12	5	20	33	-	17
W. Va.	1	3	1	1	1	1	8	7
N.C.	18	51	5	22	92	118	35	52
S.C.	3	20	1	7	11	45	18	70
Ga.	20	39	3	17	44	88	88	69
Fla.	209	189	21	24	55	68	47	91
E.S. CENTRAL	105	286	55	173	152	227	103	120
Ky.	22	26	U	U	14	24	-	10
Tenn.	57	210	39	143	97	109	48	42
Ala.	8	28	1	11	24	59	55	55
Miss.	18	22	2	-	17	35	-	13
W.S. CENTRAL	174	374	176	425	472	187	19	365
Ark.	40	29	3	20	11	19	13	14
La.	18	26	23	24	351	25	-	U
Okla.	9	101	4	24	36	48	6	15
Tex.	107	218	146	357	74	95	-	336
MOUNTAIN	189	151	55	81	27	32	57	64
Mont.	-	3	-	-	-	-	-	-
Idaho	22	2	-	2	-	-	-	-
Wyo.	1	2	1	1	-	-	-	-
Colo.	26	31	14	20	3	-	6	U
N. Mex.	24	15	13	12	3	-	12	11
Ariz.	70	62	21	34	19	32	15	27
Utah	5	10	6	10	-	-	7	11
Nev.	41	6	-	2	2	-	17	15
PACIFIC	851	414	210	50	55	51	431	621
Wash.	148	11	162	27	9	5	35	25
Oreg.	75	8	43	11	2	1	-	17
Calif.	617	383	-	-	44	44	371	544
Alaska	2	-	-	-	-	-	9	7
Hawaii	9	12	5	12	-	1	16	28
Guam	-	2	U	U	-	-	-	-
P.R.	1	7	U	U	20	48	-	-
V.I.	-	U	U	U	-	U	-	U
Amer. Samoa	-	U	U	U	-	U	-	U
C.N.M.I.	-	U	U	U	-	U	-	U

N: Not notifiable U: Unavailable -: no reported cases

*Individual cases may be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

†Cumulative reports of provisional tuberculosis cases for 1999 are unavailable ("U") for some areas using the Tuberculosis Information System (TIMS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2000†	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	2000	Cum. 2000	2000	Cum. 2000	Cum. 2000	Cum. 1999
UNITED STATES	199	243	2,070	3,354	795	1,022	-	3	-	-	3	21
NEW ENGLAND	14	18	43	40	9	31	-	-	-	-	-	1
Maine	-	2	1	2	1	-	-	-	-	-	-	-
N.H.	3	2	7	4	5	2	-	-	-	-	-	1
Vt.	2	3	2	-	2	1	-	-	-	-	-	-
Mass.	9	10	10	17	1	15	-	-	-	-	-	-
R.I.	-	-	-	-	-	2	-	-	-	-	-	-
Conn.	-	1	23	17	-	11	-	-	-	-	-	-
MID. ATLANTIC	23	39	88	222	72	164	-	-	-	-	-	-
Upstate N.Y.	13	16	50	51	18	29	-	-	-	-	-	-
N.Y. City	5	10	38	88	54	49	-	-	-	-	-	-
N.J.	4	12	-	30	-	22	-	-	-	-	-	-
Pa.	1	1	-	73	-	64	-	-	-	-	-	-
E.N. CENTRAL	22	34	234	775	96	104	-	3	-	-	3	-
Ohio	14	14	80	151	23	21	-	2	-	-	2	-
Ind.	3	2	3	12	5	4	-	-	-	-	-	-
Ill.	2	15	44	158	-	-	-	-	-	-	-	-
Mich.	3	3	101	439	68	72	-	1	-	-	1	-
Wis.	-	-	6	15	-	7	-	-	-	-	-	-
W.N. CENTRAL	6	16	233	171	47	53	-	-	-	-	-	-
Minn.	-	4	20	4	3	3	-	-	-	-	-	-
Iowa	-	3	26	24	9	9	-	-	-	-	-	-
Mo.	2	3	124	107	22	28	-	-	-	-	-	-
N. Dak.	1	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-	-	-
Nebr.	1	1	8	18	4	8	-	-	-	-	-	-
Kans.	2	4	55	18	8	5	-	-	-	-	-	-
S. ATLANTIC	58	51	230	238	154	150	-	-	-	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	-	-
Md.	19	19	28	74	24	40	-	-	-	-	-	-
D.C.	-	2	-	11	-	5	-	-	-	-	-	-
Va.	11	5	33	21	25	13	-	-	-	-	-	-
W. Va.	1	1	22	1	-	-	-	-	-	-	-	-
N.C.	5	5	62	28	55	44	-	-	-	-	-	-
S.C.	1	2	3	3	1	19	-	-	-	-	-	-
Ga.	16	13	27	78	2	23	-	-	-	-	-	-
Fla.	5	4	65	22	47	6	-	-	-	-	-	-
E.S. CENTRAL	12	15	70	95	51	86	-	-	-	-	-	-
Ky.	7	3	4	17	8	7	-	-	-	-	-	-
Tenn.	3	5	21	42	28	44	-	-	-	-	-	-
Ala.	2	5	14	23	5	17	-	-	-	-	-	-
Miss.	-	2	31	13	10	18	-	-	-	-	-	-
W.S. CENTRAL	14	17	300	580	35	111	-	-	-	-	-	2
Ark.	-	-	33	7	9	11	-	-	-	-	-	-
La.	2	6	8	35	17	40	U	-	U	-	-	-
Okla.	12	9	68	114	9	21	-	-	-	-	-	-
Tex.	-	2	191	424	-	39	-	-	-	-	-	2
MOUNTAIN	27	30	138	352	67	87	-	-	-	-	-	-
Mont.	-	1	1	4	3	1	-	-	-	-	-	-
Idaho	1	1	7	8	4	4	-	-	-	-	-	-
Wyo.	-	1	3	1	-	-	-	-	-	-	-	-
Colo.	9	1	36	67	20	18	-	-	-	-	-	-
N. Mex.	8	6	19	6	15	27	-	-	-	-	-	-
Ariz.	7	17	50	216	19	18	U	-	U	-	-	-
Utah	2	3	12	16	3	7	-	-	-	-	-	-
Nev.	-	-	10	34	3	12	-	-	-	-	-	-
PACIFIC	23	23	734	681	264	236	-	-	-	-	-	18
Wash.	2	-	33	55	7	3	-	-	-	-	-	3
Oreg.	7	8	49	54	19	17	-	-	-	-	-	8
Calif.	4	14	649	767	234	206	-	-	-	-	-	7
Alaska	1	1	3	3	3	6	-	-	-	-	-	-
Hawaii	9	-	-	2	1	4	-	-	-	-	-	-
Guam	-	-	-	2	-	2	U	-	U	-	-	-
P.R.	-	-	15	14	8	21	U	-	U	-	-	-
V.I.	-	U	-	U	-	U	U	-	U	-	-	U
Amer. Samoa	-	U	-	U	-	U	U	-	U	-	-	U
C.N.M.I.	-	U	-	U	-	U	U	-	U	-	-	U

N: Not notifiable U: Unavailable -: no reported cases

*For imported measles, cases include only those resulting from importation from other countries.

†Of 50 cases among children aged <5 years, serotype was reported for 20 and of those, 3 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 11, 2000, and March 13, 1999 (10th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999
UNITED STATES	460	536	4	70	81	37	694	913	2	5	6
NEW ENGLAND	26	30	-	-	3	3	179	106	-	1	2
Maine	2	3	-	-	-	-	7	-	-	-	-
N.H.	-	3	-	-	1	1	35	17	-	1	-
Vt.	1	2	-	-	-	-	42	9	-	-	-
Mass.	17	19	-	-	2	-	85	76	-	-	2
R.I.	-	2	-	-	-	-	6	2	-	-	-
Conn.	6	1	-	-	-	2	4	2	-	-	-
MID. ATLANTIC	35	57	1	4	12	6	99	97	2	2	-
Upstate N.Y.	8	9	1	2	2	6	38	57	2	2	-
N.Y. City	8	21	-	-	3	-	-	10	-	-	-
N.J.	9	13	-	-	-	-	-	3	-	-	-
Pa.	10	14	-	2	7	-	21	27	-	-	-
E.N. CENTRAL	55	84	-	8	9	4	127	119	-	-	-
Ohio	15	30	-	3	3	-	108	66	-	-	-
Ind.	17	6	-	-	-	3	8	8	-	-	-
Ill.	4	31	-	1	3	1	5	18	-	-	-
Mich.	16	9	-	4	3	-	6	14	-	-	-
Wis.	4	8	-	-	-	-	-	13	-	-	-
W.N. CENTRAL	45	67	-	10	2	4	25	31	-	2	-
Minn.	1	18	-	-	-	2	9	-	-	-	-
Iowa	8	9	-	3	2	1	7	6	-	-	-
Mo.	31	22	-	1	-	1	3	6	-	-	-
N. Dak.	1	-	-	-	-	-	1	-	-	-	-
S. Dak.	2	5	-	-	-	-	1	1	-	-	-
Nebr.	1	3	-	4	-	-	-	1	-	-	-
Kans.	1	12	-	2	-	-	4	17	-	2	-
S. ATLANTIC	88	69	1	9	9	1	44	56	-	-	-
Del.	-	1	-	-	-	-	1	-	-	-	-
Md.	8	13	-	2	2	-	13	23	-	-	-
D.C.	-	1	-	-	1	-	-	-	-	-	-
Va.	15	10	-	1	2	-	3	7	-	-	-
W. Va.	1	1	-	-	-	-	-	-	-	-	-
N.C.	16	10	-	2	1	-	15	19	-	-	-
S.C.	6	12	1	4	2	1	10	5	-	-	-
Ga.	17	14	-	-	-	-	2	2	-	-	-
Fla.	25	7	-	-	1	-	-	-	-	-	-
E.S. CENTRAL	29	47	-	1	1	-	17	24	-	-	-
Ky.	6	9	-	-	-	-	12	5	-	-	-
Tenn.	12	15	-	-	-	-	1	12	-	-	-
Ala.	10	14	-	1	1	-	4	6	-	-	-
Miss.	1	9	-	-	-	-	-	1	-	-	-
W.S. CENTRAL	22	47	-	-	12	-	3	25	-	-	3
Ark.	3	9	-	-	-	-	3	2	-	-	-
La.	12	24	U	-	2	U	-	2	U	-	-
Okla.	7	11	-	-	1	-	-	3	-	-	-
Tex.	-	3	-	-	9	-	-	18	-	-	3
MOUNTAIN	23	52	-	3	5	17	169	168	-	-	1
Mont.	-	-	-	-	-	-	1	1	-	-	-
Idaho	2	6	-	-	-	4	28	71	-	-	-
Wyo.	-	2	-	-	-	-	-	1	-	-	-
Colo.	7	16	-	-	2	11	92	32	-	-	-
N. Mex.	4	7	-	1	N	2	29	7	-	-	-
Ariz.	6	16	U	-	-	U	14	36	U	-	-
Utah	4	3	-	-	2	-	4	18	-	-	1
Nev.	-	2	-	2	1	-	1	2	-	-	-
PACIFIC	137	83	2	35	28	2	71	287	-	-	-
Wash.	6	12	1	2	-	1	20	62	-	-	-
Oreg.	13	20	N	N	N	1	16	3	-	-	-
Calif.	115	44	1	32	23	-	32	213	-	-	-
Alaska	1	3	-	-	1	-	2	1	-	-	-
Hawaii	2	4	-	1	4	-	1	8	-	-	-
Guam	-	-	U	-	1	U	-	-	U	-	-
P.R.	-	2	U	-	-	U	-	-	U	-	-
V.I.	-	U	U	-	U	U	-	U	U	-	U
Amer. Samoa	-	U	U	-	U	U	-	U	U	-	U
C.N.M.I.	-	U	U	-	U	U	-	U	U	-	U

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending March 11, 2000 (10th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	510	379	84	34	8	5	41
Boston, Mass.	157	106	29	18	2	2	10
Bridgeport, Conn.	62	50	10	1	-	1	-
Cambridge, Mass.	11	9	2	-	-	-	3
Fall River, Mass.	23	20	1	2	-	-	1
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	26	20	5	1	-	-	2
Lynn, Mass.	19	13	4	2	-	-	2
New Bedford, Mass.	24	24	-	-	-	-	1
New Haven, Conn.	39	28	8	1	1	1	6
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	6	4	1	-	1	-	-
Springfield, Mass.	55	36	13	3	3	-	5
Waterbury, Conn.	34	29	4	-	-	1	3
Worcester, Mass.	54	40	7	6	1	-	8
MID. ATLANTIC	2,332	1,657	450	137	44	39	123
Albany, N.Y.	62	42	16	2	-	2	8
Allentown, Pa.	U	U	U	U	U	U	U
Buffalo, N.Y.	97	69	17	7	1	1	10
Camden, N.J.	34	20	11	2	1	-	2
Elizabeth, N.J.	24	20	4	-	-	-	-
Erie, Pa.§	42	33	6	2	-	1	-
Jersey City, N.J.	41	33	6	2	-	-	-
New York City, N.Y.	1,216	853	234	85	25	18	37
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	35	26	6	3	-	-	3
Philadelphia, Pa.	342	226	79	19	10	8	20
Pittsburgh, Pa.§	51	35	10	2	3	1	2
Reading, Pa.	28	23	1	1	-	3	1
Rochester, N.Y.	109	105	26	3	1	4	16
Schenectady, N.Y.	24	18	5	1	-	-	4
Scranton, Pa.§	46	39	6	1	-	-	-
Syracuse, N.Y.	86	63	15	4	2	2	17
Trenton, N.J.	38	28	5	3	1	1	3
Utica, N.Y.	27	24	3	-	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,879	1,325	333	133	33	52	182
Akron, Ohio	62	42	13	4	-	3	3
Canton, Ohio	46	37	9	-	-	-	5
Chicago, Ill.	414	280	86	26	8	12	63
Cincinnati, Ohio	145	104	22	9	1	9	12
Cleveland, Ohio	137	86	32	12	1	6	7
Columbus, Ohio	189	138	32	15	-	4	27
Dayton, Ohio	142	107	21	9	1	4	8
Detroit, Mich.	163	93	41	22	6	1	8
Evansville, Ind.	45	33	6	5	1	-	5
Fort Wayne, Ind.	71	55	12	3	1	-	12
Gary, Ind.	16	8	2	5	1	-	2
Grand Rapids, Mich.	51	38	5	4	-	4	6
Indianapolis, Ind.	U	U	U	U	U	U	U
Lansing, Mich.	45	35	9	-	1	-	8
Milwaukee, Wis.	124	92	17	6	3	6	-
Peoria, Ill.	46	37	4	1	3	1	4
Rockford, Ill.	U	U	U	U	U	U	U
South Bend, Ind.	52	39	6	4	1	2	3
Toledo, Ohio	79	57	14	5	3	-	9
Youngstown, Ohio	52	44	3	3	2	-	-
W.N. CENTRAL	812	593	144	48	18	9	68
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	26	19	3	2	1	1	1
Kansas City, Kans.	45	26	13	3	3	-	2
Kansas City, Mo.	116	88	18	5	4	1	7
Lincoln, Nebr.	38	31	2	4	-	1	6
Minneapolis, Minn.	201	152	33	11	2	3	19
Omaha, Nebr.	92	65	19	5	2	1	12
St. Louis, Mo.	87	47	24	11	4	1	3
St. Paul, Minn.	117	95	17	4	1	-	11
Wichita, Kans.	90	70	15	3	1	1	7

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,203	757	272	108	36	30	87
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	179	105	50	14	4	6	12
Charlotte, N.C.	123	89	14	10	4	6	19
Jacksonville, Fla.	141	88	35	10	2	6	6
Miami, Fla.	116	71	27	11	6	1	8
Norfolk, Va.	51	28	12	2	3	6	4
Richmond, Va.	69	41	18	8	2	-	7
Savannah, Ga.	65	49	12	3	1	-	12
St. Petersburg, Fla.	44	37	4	2	1	-	5
Tampa, Fla.	212	145	47	11	6	3	10
Washington, D.C.	176	94	50	23	7	2	4
Wilmington, Del.	27	10	3	14	-	-	-
E.S. CENTRAL	1,010	714	201	59	18	18	96
Birmingham, Ala.	219	151	48	9	4	7	28
Chattanooga, Tenn.	71	51	14	3	1	2	10
Knoxville, Tenn.	127	93	24	8	2	-	4
Lexington, Ky.	32	17	9	3	3	-	6
Memphis, Tenn.	251	179	49	14	4	5	25
Mobile, Ala.	78	63	8	5	2	-	3
Montgomery, Ala.	58	43	12	2	1	-	7
Nashville, Tenn.	174	117	37	15	1	4	13
W.S. CENTRAL	1,530	1,021	311	116	45	37	131
Austin, Tex.	99	66	21	6	4	2	8
Baton Rouge, La.	40	27	9	4	-	-	3
Corpus Christi, Tex.	61	43	11	5	-	2	7
Dallas, Tex.	216	148	45	12	4	7	14
El Paso, Tex.	108	74	22	5	4	3	9
Ft. Worth, Tex.	100	69	21	2	3	5	7
Houston, Tex.	367	219	86	51	23	8	34
Little Rock, Ark.	84	60	14	6	2	2	3
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	240	177	40	15	3	5	19
Shreveport, La.	68	46	15	3	-	2	13
Tulsa, Okla.	127	90	27	7	2	1	14
MOUNTAIN	986	695	183	66	19	23	71
Albuquerque, N.M.	111	83	11	10	2	5	11
Boise, Idaho	49	36	10	2	-	1	4
Colo. Springs, Colo.	62	48	9	3	1	1	-
Denver, Colo.	123	77	28	11	4	3	4
Las Vegas, Nev.	205	136	50	13	4	2	19
Ogden, Utah	37	29	7	1	-	-	7
Phoenix, Ariz.	88	58	16	8	3	3	6
Pueblo, Colo.	23	19	4	-	-	-	2
Salt Lake City, Utah	127	94	19	9	1	4	11
Tucson, Ariz.	161	115	29	9	4	4	7
PACIFIC	2,012	1,467	348	123	40	29	229
Berkeley, Calif.	17	11	5	1	-	-	1
Fresno, Calif.	U	U	U	U	U	U	U
Glendale, Calif.	71	58	10	3	-	-	10
Honolulu, Hawaii	67	55	7	3	1	1	5
Long Beach, Calif.	77	57	16	2	1	1	5
Los Angeles, Calif.	1,067	774	186	69	21	17	124
Pasadena, Calif.	29	23	2	3	1	-	4
Portland, Oreg.	U	U	U	U	U	U	U
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	183	129	36	11	4	2	21
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	176	127	31	12	3	3	22
Santa Cruz, Calif.	41	26	8	4	2	1	6
Seattle, Wash.	132	93	25	9	4	1	13
Spokane, Wash.	54	41	7	2	2	2	11
Tacoma, Wash.	98	73	15	4	1	1	7
TOTAL	12,274¶	8,608	2,326	824	261	242	1,028

U: Unavailable -:no reported cases
*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.

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The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to *listserv@listserv.cdc.gov*. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at *http://www.cdc.gov/* or from CDC's file transfer protocol server at *ftp.cdc.gov*. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (888) 232-3228.

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☆U.S. Government Printing Office: 2000-533-206/08059 Region IV

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